# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Patent Application No. 10/538,095

Confirmation No. 1354

Applicant: Bas Jan Emile Van Rens

Filed: June 8, 2005

TC/AU: 3611

Examiner: Cassandra Hope Davis

Docket No.: 259348 (Client Reference No. P80185US00)

Customer No.: 23460

#### APPELLANT'S CORRECTED APPEAL BRIEF

Mail Stop Appeal Brief – Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In support of the appeal from the final rejection dated March 19, 2009, Appellant now submits his Brief.

Real Party In Interest

The patent application that is the subject of this appeal is assigned to Polymer Vision Limited.

Related Appeals and Interferences

There are no appeals or interferences that are related to this appeal.

# Status of Claims

Claims 1-10 and 12-14 are presently pending.

Claims 1-10 and 12-14 stand finally rejected, and these rejections are presently being appealed.

Claim 11 canceled.

A complete listing of claims 1-10 and 12-14 appears in the Claims Appendix.

#### Status of Amendments

No amendments were submitted after the final rejection.

## Summary of Claimed Subject Matter

Claims 1-10 and 12-14, including independent claim 1 are pending. The summaries of the claims reference the specification and drawings filed with the application on June 8, 2005.

Independent **claim 1** pertains to a display device. See, e.g., Figs. 1b, 2 and 3. The display device comprises a display (3) which is flexible and which may be present in both a first position (closed) and a second position (extended). In the first position, the display is at least largely rolled up around a shaft in a housing (5). In the second (extended) position, at least part of the display is visible. See, Fig. 1b.

The display device includes an extension structure (arm 16) that facilitates extending the display to the second (extended) position. *See*, Fig. 3, page 7, line 27, page 8, line 20. The extension structure comprises means for generating an extending force (springs 31 and 32) acting in an opposite direction with respect to a force (spring 102) driving the display towards the first (closed) position upon a transition towards the second (open) position. The extension structure is further arranged to counteract a tendency of the display to return by itself from the second (extended) position to the first (closed) position by balancing, in the second position, the extending force and the force driving a display towards the first position when in the second position. *See*, *Id*.

Dependent **claim 5** is directed to a display device wherein the locking means comprises a rotary disk with which the display can be locked in the first position. See, page 3, line 30 to page 4, line 9.

Dependent claim 7 is directed to a display device wherein:

- 1. reading means are present to determine to what extent the display in the second position is extended; and (see, page 4, lines 19-32)
- 2. driving means are present by which an image is reproduced only on the visible part of the display once the degree of extension of the display in the second position has been determined. (see, page 4, line 32 to page 5, line 2).

Dependent **claim 12** is directed to a display device wherein the display is further adapted to be present in a third position wherein the display is at least partially visible, the extension structure being further arranged to counteract a tendency of the display to return by itself from the third position to the first position by balancing in the third position a further extending force and a force driving the display from the third position towards the first position. See, Figs. 2 and 3, springs 102, 31 and 32, and page 2, lines 13-19.

Grounds of Rejection to be reviewed on Appeal

The grounds of rejection to be reviewed on appeal are the grounds stated in the Final Office Action mailed on March 19, 2009. In particular, Appellant appeals the rejection of:

- 1. Claims 1-10 and 12-14 under 35 U.S.C. §112, paragraph 2 as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 2. Claims 7 and 12 under 35 U.S.C. §112, paragraph 1 as not supported by an enabling disclosure.

# Argument

The Final Office Action rejects the presently pending claims based upon indefiniteness and non-enablement grounds. For the reasons set forth herein, the presently pending claims meet both the definiteness and enablement requirements under 35 U.S.C. Section 112, paragraphs 1 and 2.

# 1. Rejection of Claims 1-10 and 12-14 As Indefinite

# Claims 1-4, 6, 8-10 and 13-14

Appellant requests reversal of the rejection of **claim 1** as being indefinite. The Final Office Action, in section 7, states "it is unclear what structural elements correspond to the means for generating an extending force acting in an opposite direction with respect to the force driving the display towards the first position."

With regard to the means for generating an extending force recited in claim 1, Appellant directs attention generally to page 2, lines 7-19, page 3, lines 4-29, and the extension structure depicted in FIG. 3 and its corresponding written description at page 8, lines 3-20 describing various illustrative examples of the "means for generating" claim element at issue. Appellant's, in the mentioned portions of the original application, describe a cable 30 that runs within sections of the extension arm 16. In one embodiment (FIG. 3) springs connected to ends of the cable 30

generate the extending force. Alternatives to the springs depicted in FIG. 3 (e.g., electromotors and an elastic cable 30) are described for generating the extending force that causes extension of the arm to the open position.

The "force driving the display towards the first position" is disclosed, by way of example, in FIG. 2 as a spring 102 that tends to cause the display to roll up into the housing portion 5 (and the folding of the arm 16). See, page 6, lines 27-30.

Thus, the disclosure of illustrative structures render the recited "means for generating" definite.

#### Claim 5

Appellant requests reversal of the rejection of **claim 5** as being indefinite. The Final Office Action, in section 8, states "it is unclear how the rotary disk locks the display in the first position." Appellant directs attention to page 3, line 30 to page 5, line 2. In particular, page 3, line 30 to page 4, line 9 describes using a rotary disk (upon which a spring is wound) to cause the display to stay in the closed position.

#### Claim 7

Appellant requests reversal of the rejection of **claim 7** as being indefinite. The Final Office Action, in section 9, states "it is unclear what structural elements correspond to the claimed reading means and driving means." Appellant notes that claim 7's cited elements do indeed recite means for carrying out recited functions and thus invoke Section 112, paragraph 6. Moreover, Appellant submits that the corresponding structures for the "reading" and "driving" means are described in the portion of the written description beginning at page 4, line 19 and ending at page 5, line 2. The driving means also corresponds to the driving circuit 21 contained within the housing 4. See, page 7, lines 3-5.

#### Claim 12

Appellant requests reversal of the rejection of **claim 12** as being indefinite. The Final Office Action, in section 10, states "it is unclear from the specification how the display is

adapted to be presented in a third position wherein the display is partially visible." This third position corresponds to an intermediate equilibrium point where the forces seeking to extend the display and close the display are balanced. Appellant directs attention to the description of a "third position" at page 2, lines 13-19. The claimed balancing is achieved by the counteracting forces of the spring 102 (tending to close the display) and elastic portions 31 and 32 (e.g., springs) of the arm 16.

# 2. Rejection of Claims 7 and 12 As Unsupported By An Enabling Disclosure

Appellant traverses the rejection of claims 7 and 12 as not being enabled by the disclosure of the original specification, drawings and claims.

#### Claim 7

Appellant requests reversal of the rejection of **claim 7** as not enabled. The Final Office action states that the "reading means" and the "driving means" are not adequately described. Appellant again refers to the detailed description of exemplary reading and driving means at page 4, line 19 to page 5, line 2. An example of suitable reading means are light sensors on a rotary disk holding the display screen.

#### Claim 12

Appellant requests reversal of the rejection of **claim 12** as not enabled. The Final Office action states that the "third position" is not adequately described. Appellant again refers to the detailed description of exemplary third position of the display at page 2, lines 13-19. Given the disclosure of two counteracting spring forces (spring 102 and elastic portions 31 and 32), a balance between such forces while the display is in a third (intermediate) position is well within the scope of knowledge of one skilled in the relevant art.

## Conclusion

The presently pending claims and associated disclosure identified herein above meet the statutory requirements of definiteness and enablement under 35 U.S.C. Section 112, paragraphs 1 and 2. The pending claims are therefore patentable. Appellant therefore requests reversal of the presently pending rejection of claims 1-10 and 12-14.

Respectfully submitted,

Mark Joy, Reg. No. 35,562

LEYDIG, VOIT & MAYER, LTD.

Two Prudential Plaza

180 North Stetson Ave., Suite 4900

Chicago, Illinois 60601-6731 (312) 616-5600 (telephone)

(312) 616-5700 (facsimile)

Date: March 22, 2010

# Claims Appendix

1. (Previously presented) A display device comprising:

a display which is flexible and which may be present in both a first position and a second position, in which in the first position the display is at least largely rolled up around a shaft in a housing and in which in the second position at least part of the display is visible,

extension structure to facilitate extending the display to the second position,

wherein the extension structure comprises means for generating an extending force acting in an opposite direction with respect to a force driving the display towards the first position upon a transition towards the second position, the extension structure further arranged to counteract a tendency of the display to return by itself from the second position to the first position by balancing, in the second position, the extending force and the force driving a display towards the first position when in the second position.

2. (Previously presented) A display device as claimed in claim 14, wherein the foldable arm is hollow and the extension structure comprises a cable and a first pivot, the pivot being located on the first hinging point and having an outside edge, and which cable:

extends in the hollow foldable arm;

is attached to a suspension point in or on the housing;

comprises at least an elastic portion and

is present at the first hinging point along the outside edge of the first pivot when the display is in the first position.

- 3. (Previously presented) A display device as claimed in claim 2, wherein the elastic portion is a spring which is located between the suspension point and the first hinging point.
- 4. (Previously presented) A display device as claimed in claim 1, wherein locking means are present with which the display can be locked in at least one position.
- 5. (Previously presented) A display device as claimed in claim 4, wherein the locking means comprises a rotary disk with which the display can be locked in the first position.
- 6. (Previously presented) A display device as claimed in claim 2, wherein the first pivot has a non-uniform diameter.

7. (Previously presented) A display device as claimed in claim 1, wherein reading means are present to determine to what extent the display in the second position is extended;

driving means are present by which an image is reproduced only on the visible part of the display once the degree of extension of the display in the second position has been determined.

- 8. (Previously presented) A display device as claimed in claim 1, wherein the flexible display is subdivided into a number of segments oriented parallel to the shaft while each of the segments has a carrier layer.
- 9. (Previously presented) A display device as claimed in claim 8, wherein the carrier layer is transparent and reproduction of images during operation of the display takes place through the carrier layer.
- 10. (Original) A display device as claimed in claim 1, further comprising means for signal transmission to an adjustable external appliance.

# 11. (Canceled)

- 12. (Previously presented) A display device according to claim 1, wherein the display is further adapted to be present in a third position wherein the display is at least partially visible, the extension structure being further arranged to counteract a tendency of the display to return by itself from the third position to the first position by balancing in the third position a further extending force and a force driving the display from the third position towards the first position.
- 13. (Previously presented) A display device according to claim 1, wherein the means for generating opposing forces comprise elastic means.
- 14. (Previously presented) A display device according to claim 1, wherein the display is provided with support means comprising a foldable arm that is foldable around a first hinging point and can be folded along the shaft when the display is in the first position, and wherein the foldable arm supports the display in the second position.

Application No. 10/538,095

Evidence Appendix NOT APPLICABLE Related Proceedings Appendix
NOT APPLICABLE